# p-Fluoro-N,N-dimethylaniline

**Other names:** N,N-Dimethyl-4-fluoroaniline
**Inchi:** InChI=1S/C8H10FN/c1-10(2)8-5-3-7(9)4-6-8/h3-6H,1-2H3
**InchiKey:** YJEHCGOJNJUOII-UHFFFAOYSA-N
**Formula:** C8H10FN
**SMILES:** CN(C)c1ccc(F)cc1
**Mol. weight [g/mol]:** 139.17
**CAS:** 403-46-3

## Physical Properties

| Property code | Value | Unit | Source |
|---|---|---|---|
| affp | 924.80 | kJ/mol | NIST Webbook |
| basg | 898.30 | kJ/mol | NIST Webbook |
| gf | 35.23 | kJ/mol | Joback Method |
| hf | -111.97 | kJ/mol | Joback Method |
| hfus | 16.23 | kJ/mol | Joback Method |
| hvap | 37.57 | kJ/mol | Joback Method |
| ie | 7.50 | eV | NIST Webbook |
| log10ws | -1.71 | | Crippen Method |
| logp | 1.892 | | Crippen Method |
| mcvol | 111.570 | ml/mol | McGowan Method |
| pc | 3392.03 | kPa | Joback Method |
| tb | 425.81 | K | Joback Method |
| tc | 622.84 | K | Joback Method |
| tf | 251.92 | K | Joback Method |
| vc | 0.411 | m3/kmol | Joback Method |

## Temperature Dependent Properties

| Property code | Value | Unit | Temperature [K] | Source |
|---|---|---|---|---|
| cpg | 213.88 | J/mol×K | 425.81 | Joback Method |
| cpg | 226.68 | J/mol×K | 458.65 | Joback Method |
| cpg | 238.77 | J/mol×K | 491.49 | Joback Method |
| cpg | 250.18 | J/mol×K | 524.33 | Joback Method |
| cpg | 260.93 | J/mol×K | 557.17 | Joback Method |

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|---|---|---|---|---|
| cpg | 271.05 | J/mol×K | 590.01 | Joback Method |
| cpg | 280.58 | J/mol×K | 622.84 | Joback Method |

# Sources

| | |
|---|---|
| **Crippen Method:** | http://pubs.acs.org/doi/abs/10.1021/ci990307l |
| **Crippen Method:** | https://www.chemeo.com/doc/models/crippen_log10ws |
| **Joback Method:** | https://en.wikipedia.org/wiki/Joback_method |
| **McGowan Method:** | http://link.springer.com/article/10.1007/BF02311772 |
| **NIST Webbook:** | http://webbook.nist.gov/cgi/cbook.cgi?ID=C403463&Units=SI |

# Legend

| | |
|---|---|
| **affp:** | Proton affinity |
| **basg:** | Gas basicity |
| **cpg:** | Ideal gas heat capacity |
| **gf:** | Standard Gibbs free energy of formation |
| **hf:** | Enthalpy of formation at standard conditions |
| **hfus:** | Enthalpy of fusion at standard conditions |
| **hvap:** | Enthalpy of vaporization at standard conditions |
| **ie:** | Ionization energy |
| **log10ws:** | Log10 of Water solubility in mol/l |
| **logp:** | Octanol/Water partition coefficient |
| **mcvol:** | McGowan's characteristic volume |
| **pc:** | Critical Pressure |
| **tb:** | Normal Boiling Point Temperature |
| **tc:** | Critical Temperature |
| **tf:** | Normal melting (fusion) point |
| **vc:** | Critical Volume |